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Docket No.: 1254-0305PUS1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Yorimasa SUWA et al.

Application No.: 10/569,791

Confirmation No.: N/A

Filed: February 27, 2006

Art Unit: Not Yet Assigned

For: TARGET PROTEIN OF ANTIDIABETIC AND
NOVEL ANTIDIABETIC "INSUFUL"
CORRESPONDING THERETO

Examiner: Not Yet Assigned

LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Subsequent to the filing of the above-identified application on February 27, 2006, attached hereto is an English Translation of the International Preliminary Report on Patentability issued by the International Bureau on behalf of the International Searching Authority. Please make this document of record for the above-identified application.

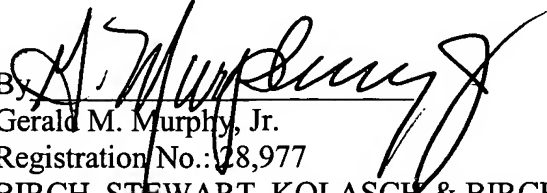
Application No.: 10/569,791

Docket No.: 1254-0305PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: September 26, 2006

Respectfully submitted,


By _____
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Attachment(s)

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

HIRAKI, Yusuke
Kamiya-cho MT Bldg. 19F
3-20, Toranomom 4-chome
Minato-ku, Tokyo 1050001
JAPON



Date of mailing (day/month/year) 03 August 2006 (03.08.2006)	
Applicant's or agent's file reference PH-2317-PCT	IMPORTANT NOTIFICATION
International application No. PCT/JP2004/016996	International filing date (day/month/year) 16 November 2004 (16.11.2004)
Applicant REVERSE PROTEOMICS RESEARCH INSTITUTE CO., LTD. et al	

1. Transmittal of the translation to the applicant.



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Masashi Honda
Facsimile No. +41 22 338 82 70	Facsimile No. +41 22 338 82 70

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PH-2317-PCT	FOR FURTHER ACTION		See item 4 below
International application No. PCT/JP2004/016996	International filing date (<i>day/month/year</i>) 16 November 2004 (16.11.2004)	Priority date (<i>day/month/year</i>) 01 December 2003 (01.12.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant REVERSE PROTEOMICS RESEARCH INSTITUTE CO., LTD.			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).		
2.	This REPORT consists of a total of 6 sheets, including this cover sheet.		
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.		
3.	This report contains indications relating to the following items:		
	<input checked="" type="checkbox"/> Box No. I	Basis of the report	
	<input type="checkbox"/> Box No. II	Priority	
	<input checked="" type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	
	<input checked="" type="checkbox"/> Box No. IV	Lack of unity of invention	
	<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
	<input type="checkbox"/> Box No. VI	Certain documents cited	
	<input type="checkbox"/> Box No. VII	Certain defects in the international application	
	<input type="checkbox"/> Box No. VIII	Certain observations on the international application	
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date of issuance of this report 27 July 2006 (27.07.2006)</td> </tr> <tr> <td style="padding: 5px;">Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Masashi Honda</div></td> </tr> <tr> <td style="padding: 5px;">e-mail: pi08@wipo.int</td> </tr> </table>	Date of issuance of this report 27 July 2006 (27.07.2006)	Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Masashi Honda</div>	e-mail: pi08@wipo.int
Date of issuance of this report 27 July 2006 (27.07.2006)				
Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Masashi Honda</div>				
e-mail: pi08@wipo.int				

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference
PH-2317-PCT

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/JP2004/016996

International filing date (day/month/year)
16.11.2004

Priority date (day/month/year)
01.12.2003

International Patent Classification (IPC) or both national classification and IPC

Applicant
REVERSE PROTEOMICS RESEARCH INSTITUTE CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/016996

Box No. 1 Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language
_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☒ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☒ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☒ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/016996

Box No. III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 9-22

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 9-22

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form ☐ has not been furnished
☐ does not comply with the standard

the computer readable form ☐ has not been furnished
☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/016996

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/2006) to pay additional fees the applicant has:
- ☐ paid additional fees
- ☐ paid additional fees under protest
- ☒ not paid additional fees
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with
- ☒ not complied with for the following reasons:

The inventions in claims 1-22 are divided into the following invention groups.

(1) those relating to a target protein of an antidiabetic agent comprising an amino acid sequence represented by SEQ ID NO: 2 in the present application and matters relating thereto (claims 1-8)

(2) those relating to a method of screening candidate substances for an antidiabetic agent using a protein comprising an amino acid sequence represented by SEQ ID NO: 2 in the present application and matters relating thereto (claims 9-13)

(3) those relating to a thiazolidine derivative represented by general formula (I) in claim 14 and a method for production thereof (claims 14-22).

The matter common to invention groups (1) and (2) is a protein comprising an amino acid sequence represented by SEQ ID NO:2 in the present application, but it is clear, as a result of the search, that J. Cell Biol. 1999, 147(4), p. 857-68 describes said protein and thus this shared matter is not novel.

Specifically, this common matter falls within the category of the prior art and thus cannot be found a special technical feature in the sense of the second sentence of PCT Rule 13.2.

Thus, there is no matter common to all claims.

In addition, there is no matter common to invention groups (1) and (3). In terms of invention groups (2) and (3), the method relating to invention group (2) is not the method of producing a thiazolidine derivative relating to invention group (3) nor is it the method used, and no special technical feature shared by these invention groups is present.

As discussed above, as there is no common matter that can be found to be a special technical feature in the sense of the second sentence of PCT Rule 13.2 among groups (1)-(3), no technical relationship can be found among these inventions differing from each other in the sense of PCT Rule 13.

Thus, the above invention groups do not fulfill the requirement for unity of invention.

4. Consequently, this opinion has been established in respect of the following parts of the international application:
- ☐ all parts
- ☒ the parts relating to claims Nos. 1-8

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/016996

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims		YES
	Claims	1-8	NO
Inventive step (IS)	Claims		YES
	Claims	1-8	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

2. Citations and explanations:

Document 1: J. Cell Biol., 1999, 147(4), p. 857-68

The inventions described in claim 1-8 do not appear to possess novelty over the document cited in the ISR.

Document 1 describes a γ tubulin ring complex protein comprising an amino acid sequence represented by SEQ ID NO:2 in the present application as well as genes encoding said protein (See Figure 1, and GenBank/EMBL/DDBJ accession number AJ249677 in particular).